

PP-104

GENE EDITING IN DESIGNER BABIES

Ishita Chaudhary

Amity Institute of Biotechnology, Amity University Madhya Pradesh

Email: ishitac29j@gmail.com

A designer baby is a baby whose genetic makeup has been selected or altered, often to include a particular gene or to remove genes associated with a particular disease and characteristics. Genetically altered embryo can be achieved by introducing desired genetic material into embryo itself or into the sperm and egg cells of the parents, either by delivering the desired genes directly into the cells or using the genetic engineering. Some scientist condones the use of this technology to treat disease, some have raised concerns that could translate into using technology for cosmetics means. CRISPR is used in this and programming favorable traits in embryos may not be used not only to eliminate the mutation of life –threatening disorders but also to enhance –human capabilities. A trait can be programmed in embryos only when criteria are met: The trait must be predominantly determined by DNA, which means that it is heritably 100% or close to it. The lower the heritability, the greater the role of nongenetic factors such as lifestyle, education and stress and the lower the likelihood that the presence of human trait, eye color, has an estimated heritability of 98% and hair curliness of 85-90%. For enhancement to be practical, the traits in question must be caused by single variant or an interaction among a limited number of variants. There is no sound scientific reason to perform this type of gene editing on human germline, and that the behavior of He and his team represents a gross violation of both Chinese regulation and the consensus reached by international science community of scientist and regulators to initiate a comprehensive discussion to develop criteria for introducing genetic modifications. The improved technologies for introducing genetic disease.